#1246788316 ID: 88076334

Revised May 1952

SB 193.3 .07 C66 1952

CONDITION AND TREND STANDARDS for GRASSLAND TYPE

Species List. The list shown below represents some of the more common plants found in the grassland type. Additions to this list should be made in areas where other species are present.

	Desirable		Intermediate		Undesirable
Agdi	Agrostis diegoensis	Agur	Agastache urticifolia	Acla	- Achillea lanulosa
Agsp	Agropyron spicatum	Brca	Bromus carinatus	ANN	- All annuals
Agtr	Agropyron trachycaulum	CAR	Carex spp (Dry land)	ANT	- Antennaria spp.
Basa	Balsamorhiza Sagittata	Daun	Danthonia unispicata	ART	- Artemesia spp.
Crac	Crepis acuminata	Elco	Elymus condensatus	ASS	- Aster spp.
Elgl	Elymus glaucus	Gevi	Geranium viscosissimum	CHR	- Chrysothamnus spp.
Feid	Festuca idahoensis	Heun	Helianthella uniflora	DEL	- Delphinium spp.
Kocr	Koeleria cristata	LUP	Lupinus spp.	ERI	- Erigeron spp.
SeSe	Senecio Serra	Pose	Poa secunda	GRI	- Grindelia spp.
Popr	Poa pratensis	PEN	Penstemon spp.	PHC	- Phacelia spp.
Putr	Purshia tridentata	PON	Potentilla spp.	PHX	- Phlox spp.
		SID	Sidalcea spp.	Seco	- Senecio columianus
		Sihy	Sitanion hystrix	WYE	- Wyethia spp.
		STI	Stipa spp.	ZYD	- Zygadenus spp.

FORAGE CONDITION STANDARDS

Density of perennial herbaceous and shrubby vegetative (Exclusive of sagebrush and rabbitbrush)	Rating
Density more than 30%	15
Density between 20% and 30%	10- 14
Density between 10% and 20%	6- 9
Density between 5% and 10%	3- 5
Density less than 5%	0- 2

Composition of all vegetation

For the purpose of evaluating forage composition in grassland types, each percentage of desirable plants will be assigned a point value of 1, each percentage of intermediate plants a value of 1/2, each percentage of undesirable perennial plants exclusive of sagebrush and rabbitbrush a value of 1/5; and each percentage of sagebrush, rabbitbrush, and all annuals will be assigned a value of 0.

If total points exceed 80	Rate	15
If total points are between 66 and 80	Rate	12-14
If total points are between 46 and 65	Rate	8-11
If total points are between 26 and 45	Rate	3-7
If total points are 25 or below	Rate	0-2

Condition of desirable browse species where present

Desirable browse plants are not being overused. Plants are still vigorous and are not hedged. Not over 10% of the plants are dead or dying. Young plants other than seedlings are present = 0

Desirable browse plants are hedged, 10% to 50% of the plants are dead or dying. Young plants are largely lacking. - 2

Desirable browse plants are severely hedged, over 50% of the plants are dead or dying. - 4

SOIL STABILIZATION STANDARDS

No evidence of soil movement. Plant and litter cover are effective in protecting the soil. There are no signs of past or present erosion. Runoff is clear. 26-30

Soil movement slight. Soil movement may be difficult to recognize. There may be evidence of past accelerated erosion, but is now stabilized. Plant and litter cover appear effective in protecting the soil. Plant pedestals are few or sloping sided. Rills, alluvial deposits, and gullies are absent or completely healed. On sloping lands some litter may be dammed against vegetation forming miniature alluvial fans. Trampling displacement is slight. Rodent activity is normal or below. 19-25

Soil movement moderate. Plant cover and litter are not effectively protecting the soil. Many bunchgrasses in openings are pedestaled. Pedestals have steep sides. Erosion pavement is forming in openings. On sloping land, occasional rills and alluvial deposits are present. Gullies, if present are not steep sided and raw. Trampling displacement and compaction are noticeable, but not excessive. Runoff is murky. 11-18

Soil movement advanced. Herbaceous plant cover and litter are completely ineffective in preventing soil movement. Openings between sagebrush are almost completely bare with well-formed erosion pavement. Pedestals beneath sagebrush, and plant pedestals in openings are 4 to 6 inches higher than the surrounding bare soil. Rills are common on sloping land. Gullies, if present, have steep, raw sides. Trampling displacement and compaction are common. Rodent activity may be excessive. Runoff is muddy. . 6-10

Soil movement severe. Plant cover and litter are completely inadequate. Subsoils are exposed in places. Pedestals of stronger perennials in openings are almost completely eroded away. Erosion pavement in openings is complete. Rills and alluvial deposits are numerous. Gullies, on sloping lands, have steep, raw sides. Rodent activity may be severe. Runoff from summer storms is flashy and muddy, often causing miniature mud flows. 0-5

TREND IN FORAGE AND SOIL - RATING - GRASSLAND TYPE

GOOD (OR EXCELLENT) CONDITION RANGE

Trend in forage condition	Rating Index Up	Rating Index Down
Desirable or choice species are reproducing the stand	+2	
Utilization of desirable species is not over 50%	+1	
Desirable browse where present is in healthy condition	+1	
Death loss or breaking up of desirable plants is noticeable		-2
Intermediate or undesirable species are invading		-2
Utilization of desirable species is over 50%		-1
Desirable browse species where present are hedged.		-1

Trend in soil condition	Up	Down
Normal cover of litter is being replaced each year	+3	
There is no visible accelerated erosion	+2	
No trampling displacement is occurring	+1	
Rodent activity is normal or below	+1	
Litter is not accumulating		-3
Plant cover is breaking up and exposing small spots of bare soil		-2
Trampling displacement is occurring		-1
Rodent activity is increasing		-1

FAIR CONDITION RANGE

Trend in forage condition	Up	Down
Desirable or choice species are invading bare spots and replacing undesirables or intermediate species.	+2	
Utilization of desirable species is not over 40%.	+1	
Desirable browse is recovering from past grazing damage	+1	
Low-value species are reproducing markedly		-2
Utilization of desirable species is over 40%		-1
Desirable browse where present is hedged, dying or dead, and inferior species, if present, are closely grazed.		-1

Trend in soil condition	Up	Down
Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial deposits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides	+1	

TREND IN FORAGE AND SOIL - RATING - GRASSLAND TYPE (Cont'd)

Trend in soil condition (continued)	Rating Index Up	Rating Index Down
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steepsides		-1

POOR CONDITION RANGE

Trend in forage condition	Up	Down
Desirable species are invading bare spots and coming in on and replacing intermediate plants or intermediate plants are replacing undesirable plants	+2	
Utilization of desirable species is not over 30%	+1	
Browse where present is recovering from past grazing damage	+1	
Low-value species and annuals are reproducing markedly		-2
Utilization of desirable species is over 30%		-1
Desirable browse where present is hedged, dying or dead, and inferior species, if present, are closely grazed		-1

Trend in soil condition	Up	Down
Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial deposits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides	+1	
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steep-sides		-1

This score card does not measure the rate of trend but is intended only to indicate the direction of change within the previously determined forage and soil condition classes. An excess score in the up column indicates upward trend, whereas an excess score in the down column indicates downward trend. A close balance indicates there is no marked trend up or down. Do not grade items which do not apply.

Revised May 1952

# CONDITION AND TREND STANDARDS
for
PINE-PINEGRASS - ELK SEDGE SUBTYPE

Species List. The list shown below represents some of the more common plants within this type. Additions to this list should be made in areas where other plants are common.

Desirable

Amal Amelanchier alnifolia
Cafe Carex festivella
Cage Carex geyeri
Caro Carex rossi
Caru Calamagrostis rubescens
Crac Crepis acuminata
Elgl Elymus glaucus
HIR Hieracium spp.
Kocr Koeleria cristata
Putr Purshia tridentata
SAL Salix spp.

Intermediate

Basa Balsamorhiza sagittata
Brca Bromus carinatus
Cado Carex douglasi
CAR Carex spp. (dry land)
Ceve Ceanothus velutinus
Gevi Geranium viscosissimum
LUP Lupinus spp.
Pone Poa nervosa
Shca Shepherdia canadensis
Sihy Sitanion hystrix
Stco Stipa columbiana
Syal Symphoricarpos albus
Vame Vaccinium membranaceum

Undesirable

Acla Achillea lanulosa
ANN Annuals (all)
ANT Antennaria spp.
Arco Arnica cordifolia
Arpa Arctostaphylos patula
Aruv Arctostaphylos uva-ursi
Deel Deschampsia elongata
Feoc Festuca occidentalis
FRG Fragaria spp.
Mare Mahonia repens
PEN Penstemon spp.
Pose Poa secunda
Sedo Sedum douglasi
Splu Spiraea lucida

FORAGE CONDITION STANDARDS

Density of perennial herbaceous and shrubby vegetation (Exclusive of sagebrush and rabbitbrush)	Rating
Density more than 20%	16- 18
Density between 15 and 20%	12- 15
Density between 10% and 15%	7- 11
Density between 5% and 10%	4- 6
Density less than 5%	0- 3

Composition of all vegetation

For the purpose of evaluating composition, each percentage of desirable plants will be assigned a value of 1; each percentage of intermediate plants a value of 1/2; each percentage of undesirable perennial plants exclusive of sagebrush and rabbitbrush a value of 1/5, and each percentage of sagebrush, rabbitbrush and all annuals will be assigned a value of 0.

If total points exceed 85	Rate	12
If total points are between 71 and 85	Rate	10- 11
If total points are between 51 and 70	Rate	7- 10
If total points are between 31 and 50	Rate	4- 6
If total points are 30 or less	Rate	0- 3

Density of tree reproduction (More than 1 foot tall and less than 6 inches d.b.h.)

	Rating
Less than 500 per acre	0
Between 500 and 1000 per acre	-1
More than 1000 per acre	-2

Accessibility of desirable species

More than 90% of desirable species are accessible	0
75% to 90% of desirable species are accessible	-1
50% to 75% of desirable species are accessible	-2
Less than 50% of desirable species are accessible	-3

SOIL STABILIZATION STANDARDS

Erosion Ratings

Accelerated erosion is not evident on unlogged ranges. No gullies or rills appear. Ground disturbed by logging is completely stabilized by perennial vegetation and litter.	13-15
Accelerated erosion is not active on unlogged ranges. Small rills or gullies (3-6 inches deep) may appear, but these are stabilized by perennial vegetation. Ground disturbed by logging is not yet completely stabilized by perennial vegetation and litter.	9-12
Accelerated erosion is active both on unlogged ranges and along skid roads, landings and temporary spur roads. Small rills and gullies are not stabilized by perennial vegetation. Finer particles of litter are dammed up against clumps of grass after heavy rains.	5-8
Accelerated erosion is active both on unlogged ranges and along skid roads, landings and temporary spur roads. Rills and gullies are steep-sided. Rills deeper than 6 inches are numerous.	0-4

Litter rating

There are several year's accumulation of raw litter made up of both coniferous needles and leaves of grasses and weeds. Grass litter is conspicuous. 90% or more of the spaces between grass and weed plants are covered by litter. Total depth of litter is 1 inch or more. Both partially decomposed and raw litter are present	13-15
Raw litter covers 75% to 90% of the spaces between grass and weed plants. Raw and partially decomposed litter is 1/2 to 1 inch deep. Current grass litter is present.	8-12
Raw litter covers 50% to 75% of the spaces between grass and weed plants. Raw and partially decomposed litter is 1/4" to 1/2" deep. Current grass litter is mostly lacking.	4-7
Raw litter covers less than 50% of the spaces between perennial grass and weed plants. Beneath the raw litter a partially decomposed layer is largely lacking. Current litter from accessible grass plants is completely lacking.	0-3

TREND IN FORAGE AND SOIL - RATING

GOOD (OR EXCELLENT) CONDITION RANGE

Trend in forage condition	Rating Index	
	Up	Down
Desirable or choice species are reproducing the stand	+2	
Utilization of desirable species is not over 50%	+1	
Desirable browse is in healthy condition	+1	
Desirable browse species show no hedging over past 2 year period	+1	
Death loss or breaking up of desirable plants is noticeable		-2
Less desirable species are invading		-2
Utilization of desirable species is over 50%		-1
Desirable browse species are hedged		-1

Trend in soil condition	Up	Down
Normal cover of litter is being replaced each year	+3	
There is no visible accelerated erosion	+2	
No trampling displacement is occurring	+1	
Rodent activity is normal or below	+1	
Litter is not accumulating		-3
Plant cover is breaking up and exposing small spots of bare soil		-2
Trampling displacement is occurring		-1
Rodent activity is increasing		-1

FAIR CONDITION RANGE

Trend in forage condition	Up	Down
Desirable or choice species are invading bare spots and replacing undesirables or intermediate species	+2	
Utilization of desirable species is not over 40%	+1	
Desirable browse is recovering from past grazing damage	+1	
Low-value species are reproducing markedly		-2
Utilization of desirable species is over 40%		-1
Desirable browse is hedged, dying or dead, and inferior species, if present, are closely grazed		-1

Trend in soil condition	Up	Down
Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial depcsits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides	+1	

TREND IN FORAGE AND SOIL - RATING (Continued)

Trend in soil condition (continued)

	Rating Index	
	Up	Down
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steep-sides		-1

POOR CONDITION RANGE

(Consider Intermediate species when Desirables not present.)

Trend in forage condition

	Up	Down
Desirable species are invading bare spots and coming in on and replacing other intermediate plants or intermediate plants are replacing undesirable plants	+2	
Utilization of desirable species is not over 25%	+1	
Browse is recovering from past grazing damage	+1	
Low-value species and annuals are reproducing markedly		-2
Utilization of desirable species is over 25%		-1
Desirable browse is hedged, dying or dead, and inferior species, if present, are closely grazed		-1

Trend in soil condition

	Up	Down
Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial deposits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides	+1	
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steep-sides		-1

This score card does not measure the rate of trend but is intended only to indicate the direction of change within the previously determined forage and soil condition classes. An excess score in the up column indicates upward trend, whereas an excess score in the down column indicates downward trend. A close balance indicates there is no marked trend up or down, hence, the type's trend should be classified as Not Apparent. Do not grade items which do not apply.

CONDITION AND TREND STANDARDS

(Rev. May. 1952

FOR

PINE-BROWSE-GRASS SUB-TYPE

Species List. The list shown below represents some of the more common plants within this type. Additions to this list should be made in areas where other plants are common.

Desirable	Intermediate	Undesirable
Agsp Agropyron spicatum	Brca Bromus carinatus	Acla Achillea lanulose
Agtr Agropyron trachycaulum	CAR Carex spp (Dry land)	ANN Annuals (all)
Amal Amelanchier alnifolia		ANT Antennaria spp.
Basa Balsamorhiza sagittata	Cele Cercocarpus ledifolius	
Caru Calamagrostis rubescens		ART Artemesia spp.
Cage Carex geyeri	Ceve Ceanothus velutinus	
Cafe Carex festivella	Gevi Geranium viscosissimum	ASS Aster spp.
Cebe Cercocarpus betuloides	Heun Helianthella uniflora	CHR Chrysothamnus spp.
Crac Crepis acuminata	Pose Poa secunda	ERO Eriogonum spp.
Elgl Elymus glaucus	RIB Ribes spp.	Mare Mahonia repens
Feid Festuca idahoensis	Sihy Sitanion hystrix	PEN Penstemon spp.
Kocr Koeleria cristata	STI Stipa spp.	SPI Spiraea spp.
Putr Purshia tridentata	Syal Symphoricarpos albus	WYE Wyethia spp.

FORAGE CONDITION STANDARDS

Density of perennial herbaceous and shrubby vegetation (Exclusive of sagebrush and rabbitbrush)	Rating
Density more than 20%	15
Density between 15% and 20%	12-14
Density between 10% and 15%	7-11
Density between 5% and 10%	3-6
Density less than 5%	0-2

Composition of all vegetation

For the purpose of evaluating composition, each percentage of desirable plants will be assigned a value of 1; each percentage of intermediate plants a value of $\frac{1}{2}$; each percentage of undesirable perennial plants exclusive of sagebrush and rabbitbrush a value of 1/5; and each percentage of sagebrush, rabbitbrush and all annuals will be assigned a value of 0.

If total points exceed 75	-	Rate	15
If total points are between 61 and 75	-	Rate	12-14
If total points are between 46 and 60	-	Rate	8-11
If total points are between 25 and 45	-	Rate	3-7
If total points are 25 or below	-	Rate	0-2

Condition of desirable browse species

(Consider Intermediate species when Desirables not present)

Desirable browse plants are not being overused. Plants are still vigorous and are not hedged. Not over 10% of the plants are dead or dying. Young plants other than seedlings are present - 0

	Rating
Desirable browse plants are hedged, 10% to 50% of the plants are dead or dying. Young plants are largely lacking.	- 1
Desirable browse plants are severely hedged, over 50% of the plants are dead or dying.	- 2

Density of tree reproduction (More than 1 foot tall and less than 6 inches D.B.H.)

Less than 500 per acre	- 0
Between 500 and 1000 per acre	- 1
More than 1000 per acre	- 2

SOIL STABILIZATION STANDARDS

Erosion Ratings

Accelerated erosion is not evident on unlogged ranges. No gullies or rills appear. Ground disturbed by logging is completely stabilized by perennial vegetation and litter.	13-15
Accelerated erosion is not active on unlogged ranges. Small rills or gullies (3-6 inches deep) may appear, but these are stabilized by perennial vegetation. Ground disturbed by logging is not yet completely stabilized by perennial vegetation and litter.	9-12
Accelerated erosion is active both on unlogged ranges and along skid roads, landings and temporary spur roads. Small rills and gullies are not stabilized by perennial vegetation. Finer particles of litter are dammed up against clumps of grass after heavy rains.	5-8
Accelerated erosion is active both on unlogged ranges and along skid roads, landings and temporary spur roads. Rills and gullies are steep-sided. Rills deeper than 6 inches are numerous.	0-4

Litter rating

There are several years' accumulation of raw litter made up of both coniferous needles and leaves of grasses and weeds. Grass litter is conspicuous. 75% or more of the spaces between grass and weed plants are covered by litter. Total depth of litter is ½ inch or more. Both partially decomposed and raw litter are present.	13-15
Raw litter covers 50% to 75% of the spaces between grass and weed plants. Raw and partially decomposed litter is less than ½ inch thick, the lower portion of this layer being incorporated with mineral soil	7-12
Raw litter covers less than 50% of the spaces between grass and weed plants. Beneath the raw litter, a partially decomposed layer is largely lacking. Current litter from accessible grass and weed plants is completely lacking.	0-6

TREND IN FORAGE AND SOIL - RATING

GOOD (OR EXCELLENT) CONDITION RANGE

Trend in forage condition

	Rating Index Up	Rating Index Down
Desirable or choice species are reproducing the stand	+2	
Utilization of desirable species is not over 50%	+1	
Desirable browse is in healthy condition	+1	
Desirable browse species show no hedging over past 2 year period	+1	
Death loss or breaking up of desirable plants is noticeable		-2
Less desirable species are invading		-2
Utilization of desirable species is over 50%		-1
Desirable browse species are hedged		-1

Trend in soil condition

Normal cover of litter is being replaced each year	+3	
There is no visible accelerated erosion	+2	
No trampling displacement is occurring	+1	
Rodent activity is normal or below	+1	
Litter is not accumulating		-3
Plant cover is breaking up and exposing small spots of bare soil		-2
Trampling displacement is occurring		-1
Rodent activity is increasing		-1

FAIR CONDITION RANGE

Trend in forage condition

Desirable or choice species are invading bare spots and replacing undesirables or intermediate species	+2	
Utilization of desirable species is not over 40%	+1	
Desirable browse is recovering from past grazing damage	+1	
Low-value species are reproducing markedly		-2
Utilization of desirable species is over 40%		-1
Desirable browse is hedged, dying or dead, and inferior species, if present, are closely grazed		-1

Trend in soil condition

Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial depcsits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides	+1	

TREND IN FORAGE AND SOIL - RATING (Continued)

Trend in soil condition (continued)

	Rating Index	
	Up	Down
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steep-sides		-1

POOR CONDITION RANGE

(Consider Intermediate species when Desirables not present.)

Trend in forage condition

	Up	Down
Desirable species are invading bare spots and coming in on and replacing other intermediate plants or intermediate plants are replacing undesirable plants	+2	
Utilization of desirable species is not over 25%	+1	
Browse is recovering from past grazing damage	+1	
Low-value species and annuals are reproducing markedly . . .		-2
Utilization of desirable species is over 25%		-1
Desirable browse is hedged, dying or dead, and inferior species, if present, are closely grazed		-1

Trend in soil condition

	Up	Down
Litter is building up and covering bare spots between grass clumps	+2	
Gullies, if present, are healing, with sides well covered with perennial grasses	+2	
Rills and alluvial deposits are being stabilized with perennial grasses	+2	
Trampling displacement is insignificant	+1	
Pedestals of desirable species are healing on the sides . . .	+1	
Litter is not accumulating and soil surface is being exposed		-2
Gullies are not healing over with perennial grasses		-2
Rills and alluvial deposits are not being stabilized with perennial grasses		-2
Trampling displacement is noticeable		-1
Pedestals of desirable species are steep-sides		-1

This score card does not measure the rate of trend but is intended only to indicate the direction of change within the previously determined forage and soil condition classes. An excess score in the up column indicates upward trend, whereas an excess score in the down column indicates downward trend. A close balance indicates there is no marked trend up or down, hence, the type's trend should be classified as Not Apparent. Do not grade items which do not apply.

CONDITION AND TREND STANDARDS

(Rev. May 1952)

FOR

SAGEBRUSH-GRASS TYPE

Species List. The list shown below represents some of the more common plants found in the Sagebrush-Grass types of the region. Additions to this list should be made in areas where other species are common.

Desirable	Intermediate	Undesirable
Agsp Agropyron spicatum	Agur Agastache urticifolia	Acla Achillea lanulosa
Agtr Agropyron trachycaulum	CAR Carex spp. (Dry land)	ANN Annuals (all)
Amal Amelanchier alnifolia	Elco Elymus condensatus	ANT Antennaria spp.
Basa Balsamorhiza sagittata	Gevi Geranium viscosissimum	ART Artemesia spp.
Crac Crepis acuminata	Heun Helianthella uniflora	ASS Aster spp.
Elgl Elymus glaucus	LUP Lupinus spp.	CHR Chrysothamnus spp.
Feid Festuca idahoensis	PON Potentilla spp.	DEL Delphinium spp.
Kocr Koeleria cristata	Pose Poa secunda	ERG Erigeron spp.
Pone[2] Poa nevadensis	SID Sidalcea spp.	Gusa Gutierrezia sarothrae
Popr Poa pratensis	Sihy Sitanion hystrix	PHC Phacelia spp.
Putr Purshia tridentata	STI Stipa spp.	PHX Phlox spp.
Sese Senecio serra		Podo Polygonum douglas
		Seco Senecio columbian
		TET Tetradymia spp.
		Veth Verbascum thapsus
		WYE Wyethia spp.
		ZYG Zygadenus spp.

FORAGE CONDITION STANDARDS

Density of perennial herbaceous and shrubby vegetation (exclusive of sagebrush and rabbitbrush)	Rating
Density more than 20%	12
Density between 15% and 20%	9-11
Density between 10% and 15%	6-8
Density between 5% and 10%	3-5
Density less than 5%	0-2

Composition of all vegetation

For the purpose of evaluating forage composition in sagebrush types, each percentage of desirable plants will be assigned a point value of 1; each percentage of intermediate plants a value of $\frac{1}{2}$; each percentage of undesirable perennial plants except sagebrush, rabbitbrush, and annuals, a value of 1/5; and each percentage of sagebrush, rabbitbrush and all annuals will be assigned a value of 0.

If total points exceed ~~65~~ 60	Rate 17-18
If total points are between ~~51~~ 46 and ~~65~~ 60	Rate 12-16
If total points are between ~~36~~ 31 and ~~50~~ 45	Rate 7-11
If total points are between ~~21~~ 16 and ~~35~~ 30	Rate 3-6
If total points are ~~20~~ 15 or below	Rate 0-2

Rating

Accessibility of desirable grasses and weeds
(If desirable species are not present, the predominant intermediate species will be used)

More than 60% of the desirable species are accessible 0
From 40% to 60% of the desirable species are accessible . . . - 1
Less than 40% of the desirable species are accessible . . . . - 2

SOIL STABILIZATION STANDARDS

No evidence of soil movement. Plant and litter cover are effective in protecting the soil. There are no signs of past or present erosion. Runoff is clear. Rodent activity is usually absent. 26-30

Soil movement slight. Soil movement may be difficult to recognize. There may be evidence of past accelerated erosion, but is now stabilized. Plant and litter cover appear effective in protecting the soil. Plant pedestals are few or sloping sided. Rills, alluvial deposits, and gullies are absent or completely healed. On sloping lands some litter may be dammed against vegetation forming miniature alluvial fans. Trampling displacement is slight. Rodent activity is inconspicuous. . . . 19-25

Soil movement moderate. Plant cover and litter are not effectively protecting the soil. Many bunchgrasses in openings are pedestaled. Pedestals have steep sides. Erosion pavement is forming in openings. On sloping land, occasional rills and alluvial deposits are present. Gullies, if present are not steep sided and raw. Trampling displacement and compaction are noticeable, but not excessive. Runoff is murky. Rodent activity is noticeable but not excessive. . . 11-18

Soil movement advanced. Herbaceous plant cover and litter are completely ineffective in preventing soil movement. Openings between sagebrush are almost completely bare with well-formed erosion pavement. Pedestals beneath sagebrush, and plant pedestals in openings are 4 to 6 inches higher than the surrounding bare soil. Rills are common on sloping land. Gullies, if present, have steep, raw sides. Trampling displacement and compaction are common. Rodent activity may be excessive. Runoff is muddy. 6-10

Soil movement severe. Plant cover and litter are completely inadequate. Subsoils are exposed in places. Pedestals of stronger perennials in openings are almost completely eroded away. Erosion pavement in openings is complete. Rills and alluvial deposits are numerous. Gullies, on sloping lands, have steep, raw sides. Rodent activity may be severe. Runoff from summer storms is flashy and muddy, often causing miniature mud flows. 0-5

FORAGE AND SOIL TREND RATINGS

Good and Excellent Condition Sagebrush-Grass Types

Trend in forage condition	Rating Index UP	Rating Index DOWN
A good age class distribution of desirable species is present. Intermediate species are not invading to a marked extent	+3	
A good age class distribution of desirable species is not present. Young thrifty plants of intermediate species are invading.		-3
Utilization of desirable species is not over 50%.	+2	
Utilization of desirable species is over 50%.		-2
Desirable browse species are in healthy condition	+2	
Desirable browse species are hedged		-2
Young sagebrush, rabbitbrush and other undesirable species are invading openings		-2
Young sagebrush, rabbitbrush and other undesirable species are not invading the openings	+2	

Trend in soil condition	UP	DOWN
Normal cover of litter is being replaced each year.	+3	
Normal cover of litter is not being replaced each year.		-3
There is no visible accelerated erosion	+2	
There is visible accelerated erosion.		-2
Trampling displacement is not noticeable.	+2	
Trampling displacement is noticeable.		-2
Rodent activity is inconspicuous and not increasing	+1	
Rodent activity is noticeable and is increasing		-1
Rills are present on steeper south and southwest facing slopes.		-2
Rills are not present on steeper south and southwest facing slopes.	+2	
Pedestals are becoming more pronounced and have steep sides		-1
Pedestals sides are becoming sloped and covered with litter	+1	

Fair & Poor Condition Sagebrush-Grass Range

(Consider Intermediate species when Desirables not present)

Trend in forage condition	UP	DOWN
Desirable species are reproducing, especially along edges of pedestals near sagebrush plants.	+3	
Utilization of desirable species is not over 40% on fair condition and 30% on poor condition ranges.	+2	
Utilization of desirable species is over 40% on fair condition and 30% on poor condition ranges		-2
Desirable browse species are recovering from past hedging. Two or more years growth extends past old hedged surfaces.	+3	

Fair & Poor Condition Continued

	UP	DOWN
Desirable browse species are still being hedged and some plants are dying		-3
Young sagebrush, rabbitbrush and other undesirable plants continue to come into openings		-2

Trend in soil condition

Litter is accumulating near clumps of perennial grasses and beneath sagebrush and other shrubs. Where cover is primarily annuals, a good nearly unbroken mat of litter is accumulating.	+3	
Litter is not accumulating near clumps of perennial grasses and beneath sagebrush and other shrubs. Where cover is primarily annuals, litter is not accumulating.		-3
Pedestals beneath old shrubs and strongly rooted perennial grasses are steep sided and 3 to 6 inches higher than in openings. Grass roots are often exposed		-2
Pedestals are becoming sloping sided and covered with litter	+2	
Rills are beginning to show on moderately sloping land		-2
Rills are healing and becoming indistinct on steeper slopes.	+2	
Gullies are elongating, are v-shaped with raw sides and are cutting in the bottoms		-3
Gullies, where present, have moderately sloping sides. Perennial plants are becoming established on the sides and bottoms.	+3	
Rodent activity is inconspicuous and is not increasing	+1	
Rodent activity is noticeable and is increasing.		-1
Trampling displacement is insignificant.	+1	
Trampling displacement is noticeable		-1

This score card does not measure the rate of trend but is intended only to indicate the direction of change within the previously determined forage and soil condition classes. An excess score in the up column indicates upward trend, whereas an excess score in the down column indicates downward trend. A close balance indicates there is no marked trend up or down; hence, the type's trend should be classified as "Not Apparent". Do not grade items which do not apply.

(Rev. May 1952)

CONDITION AND TREND STANDARD

FOR

MOUNTAIN MEADOW TYPE

Species list. The list shown below represents some of the more common meadow plants. Additions to this list should be made in areas where other plants are common.

Desirable

Agdi Agrostis diegoensis
Agex Agrostis exarata
Cane Carex nebraskensis
CAR Carex spp. (Meadow)
Deca Deschampsia caespitosa

Eltr Elymus triticoides
Feru Festuca rubra
Phpr Phleum pratense
Pocu Poa cusicki
Popr Poa pratensis
Pofr Potentilla fruticosa
SAL Salix spp.

Intermediate

Brca Bromus carinatus
Cafe Carex festivella
CAR spp. (dry land).

Daca Danthonia californica

Hono Hordeum nodosum

Poco Poa compressa
PON Potentilla spp.
Sihy Sitanion hystrix
STI stipa spp.
TRF Trifolium spp.

Undesirable

Acla Achillea lanulosa
ANN Annuals (all)
ANT Antennaria spp.
ART Artennesia spp.

ASS Aster spp.
CHR Chrysothamnus spp.
Deel Deschampsia elongata
FRG Fragaria spp.
Juba Juncus balticus
Musq. Muhlenbergia squarros
PEN Penstemon spp.
RAN Ranunculus spp.
Seco Senecio columbianus
Taof Taraxacum officinale
Veca Veratrum californicum

FORAGE CONDITION STANDARDS

Density of all perennial cover	Rating
Density more than 60%	12
Density between 50% and 60%	10-11
Density between 40% and 50%	8-9
Density between 30% and 40%	6-7
Density between 20% and 30%	4-5
Density less than 20%	0-3

Composition of all vegetation

For the purpose of evaluating forage composition in meadows, each percentage of Deca and Cane will be assigned a point value of $1\frac{1}{4}$; each percentage of other desirable plants a value of 1; each percentage of Intermediate plants a value of $\frac{1}{2}$; each percentage of undesirable perennial plants except Sagebrush, Rabbitbrush and annuals a value of 1/5; and each percentage of Sagebrush, Rabbitbrush and all annuals will be assigned a value of 0.

If total points exceed 100 - Rate 17 - 18
If total points are between ~~76 and 100~~ 81 and 100 Rate 12 - 16
If total points are between ~~51 and 75~~ 61 and 80 Rate 8 - 12
If total points are between ~~25 and 50~~ 36 and 60 Rate 4 - 7
If total points are ~~25 or below~~ 35 or below Rate 0 - 3

SOIL STABILIZATION STANDARDS

	Rating
Permanent and intermittent stream courses	
Stream courses are sodded to the waters edge. The sod is unbroken on the shoulders of stream banks. No gullying or active stream channelling is taking place	14-15
Shoulders of streambanks occasionally exhibit loose soil, and sod is being broken along ungullied stream courses. Gullied stream courses have rounded sides which are completely stabilized by perennial vegetation.	10-13
Stream channels show active cutting. Gullies are not deep but banks are raw and bank caving is prevalent. Side gullies sometimes eat into the meadow from the main drainage course. Former deep gullies are partially stabilized by perennials	5-9
Stream channels are cut deeply. Side gullies are extensive. Banks are steep, raw, and completely unstabilized	0-4
Soil condition on meadows exclusive of stream courses	
(When no stream courses are present, double the below rating)	
There is no noticeable soil movement, and no continuous areas of exposed bare soil. The soil is protected by an almost continuous sod of desirable and less desirable perennials. Interspaces between plants are covered by litter. Rodent activity is inconspicuous.	14-15
Soil movement is slight. Soil on drier parts of the meadow is sometimes bare and exposed. Litter covers over 75% of the interspaces between plants, but does not protect all of the soil. Rodent activity is noticeable but not excessive.	10-13
Soil movement is active. Considerable bare soil is often loose where rodents are involved, but may be compacted by trampling elsewhere. Litter covers from 25% to 75% of the interspaces between plants, and is ineffective in protecting the soil. Rodent activity is conspicuous and excessive.	5-9
Soil movement is severe. Soils are predominately bare and exposed. Soil may be loose or compacted. Soils may bake and crack when dry. Litter covers less than 25% of the interspaces between plants. Rodent activity is conspicuous and excessive.	0-4

FORAGE AND SOIL TREND RATINGS

Good and Excellent Condition Meadows

Trend in forage condition

	Rating Index	
	Up	Down
There is a good age class distribution of Deca	+3	
On drier sites the stand of Deca is thinning, and there are numerous dead plants and a lack of young plants and seedlings. Young thrifty plants of Brca, Agtr, Cafe, Kocr, and Daca are coming in		-2
Sod-forming grasses such as Popr, Agdi, Feru are spreading	+1	
" " " " " " " are not spreading		-1
Many young thrifty plants of Asoc, Seco, PON, and Acla are coming in on drier sites		-1
Utilization is not more than 55% on Deca, 30% on Feru, and 70% on Popr.	+2	
Utilization is more than 55% on Deca, 30% on Feru, and 70% on Popr.		-2

Trend in soil condition

Localized breaking of sod is not occurring.	+2	
Localized breaking of sod is occurring		-2
Bare soil is not showing on the shoulders of streams and on the driest sites	+3	
Bare soil is showing on the shoulders of streams and on the driest sites		-3
Streambank erosion is beginning.		-3
Streambank erosion is not beginning.	+3	

Fair Condition Meadows

Trend in forage condition

Deca is thinning except in the wettest spots as shown by numerous dead plants and the lack of young plants		-2
Desirable grasses are increasing and becoming established on the driest areas	+2	
Vigorous, showy perennial weeds are spreading into moderately moist localities		-1
Young, thrifty plants of Brca, Mufi, Deel, and Hono are coming in on wet spots		-1
Weakened sod-forming grasses are only scattered through perennial weed patches or in dense, almost pure bands around the moistest spots		-1
Stco, Artr, Arca and other undesirables are invading the driest areas		-1
Patchiness of the cover is becoming indistinct	+2	
Perennial weeds and secondary grasses show weakened vigor in response to the competition from better species.	+2	
Utilization of Popr is not over 65% and other desirable perennials are not utilized over 50%.	+2	
Utilization of Popr is over 65% and other desirable perennials are utilized over 50%.		-2

Fair Condition (Condition)

Trend in soil condition	Up	Down
Cutting of stream channel is obvious as is headward cutting of side drainages		-2
Stream banks are barren and eroding		-2
Mud bars along streams are fresh and have no perennial vegetation		-2
Considerable dead herbage material is forming litter	+2	
Stream bank erosion is being rapidly arrested by perennial vegetation	+2	
Side drainages and mud bars are being stabilized by perennial vegetation	+2	

Poor Condition Meadows

(Consider Intermediate species when Desirables not present)

Trend in forage condition

Perennial plant cover is thickening. Small spots of Popr, Agdi, and Feru are spreading into patches of annual weeds.	+2	
Perennial plant cover is not thickening. Popr, Agdi and Feru are not spreading into patches of annual weeds		-2
Young, thrifty Deca plants are becoming established in more moist areas.	+2	
Utilization of the desirable perennials Deca and Popr is excessive		-3
Utilization of the desirable perennials Deca and Popr is not excessive	+3	
MAD, Podo, GAY, and other annual weeds are spreading over most of the meadow, even around old perennial grasses		-2
Young sagebrush plants are moving in toward the meadow center.		-2
Perennial weeds and grasses are invading annual species.	+2	

Trend in soil condition

Stream channels are currently being deepened or widened.		-3
Stream channels are not currently being deepened or widened.	+3	
Side gullies are continuing to lengthen by headward erosion.		-3
Side gullies are not continuing to lengthen by headward erosion.	+3	
Stream and gully banks are being covered with perennial vegetation	+3	
Stream and gully banks are not being covered with perennial vegetation		-3
Litter is building up and covering bare ground	+2	
Litter is not building up and covering bare ground		-2
Silt deposits and stream bars are becoming stabilized by sedges	+2	
Silt deposits and stream bars are not becoming stabilized by sedges		-2

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(Rev. May 1952)

TABLE OF

SURFACE ACRES OF USABLE RANGE PER AUM

The following tables have been set up for the purpose of calculating the data gathered on the Warner District Survey of 1950, and the Drews Valley and Goose Creek data of 1951. This data is a breakdown of the tables formulated at the joint meeting of Research and Administrative Personnel held at LaGrande, Oregon in the spring of 1951, correlated with data which was obtained by summarizing the Forage Acre factors and condition point ratings of all range types surveyed on the Warner District in 1950.

		Cattle			Sheep		
	Point Rating:	Mtn. Meadow	Sagebrush Grass	Pine Browse Grass	Mtn. Meadow	Sagebrush Grass	Pine Browse Grass
	30	.50	3.0	4.0	.15	.5	.6
	29	.55	3.2	4.1	.16	.56	.65
Excellent	28	.60	3.4	4.2	.17	.62	.70
	27	.65	3.6	4.4	.18	.68	.75
	26	.70	3.8	4.6	.19	.74	.80
	25	.75	4.0	4.9	.20	.80	.90
	24	.80	4.2	5.2	.21	.86	1.0
	23	.85	4.4	5.5	.22	.92	1.1
	22	.90	4.6	5.9	.23	1.0	1.2
Good	21	.95	4.8	6.5	.24	1.1	1.4
	20	1.00	5.0	7.0	.25	1.2	1.6
	19	1.05	5.3	7.5	.26	1.3	1.8
	18	1.10	5.6	8.0	.27	1.4	2.0
	17	1.15	5.9	8.5	.28	1.5	2.2
	16	1.20	6.2	9.0	.30	1.6	2.4
	15	1.30	6.5	9.5	.32	1.7	2.6
Fair	14	1.40	6.8	10.0	.35	1.8	2.8
	13	1.50	7.2	11.0	.38	1.9	3.0
	12	1.70	7.6	12.0	.42	2.0	3.2
	11	1.90	8.0	13.0	.48	2.2	3.6
	10	2.20	9.0	14.0	.58	2.4	3.8
	9	2.50	10.0	15.0	.70	2.7	4.0
Poor	8	3.00	11.0	16.0	.80	3.0	4.4
	7	4.00	13.0	18.0	1.00	3.5	4.8
	6	5.00	15.0	23.0	1.20	4.0	6.0
	5	6.00	18.0	28.0	1.50	5.0	7.0
	4	8.00	22.0	40.0	2.00	6.0	10.0
	3	12.00	30.0	55.0		8.0	
	2)*	16.00	40.0			10.0	
	1)*						

)* Should not be grazed.

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